

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: John W. Forsberg; Mark E. Confirmation No. 9349
Schommer; David P.
Olson; William C. Phillips;
Alex C. Toy; Charles R.
Lewis, Jr.
Serial No.: 10/693,005
Filed: October 24, 2003 Customer No.: 28863
Examiner: Christopher A. Flory
Group Art Unit: 3762
Docket No.: 1023-294US01
Title: MEDICAL DEVICE PROGRAMMER WITH INFRARED
COMMUNICATION

CERTIFICATE UNDER 37 CFR 1.8 I hereby certify that this correspondence is being transmitted via the United States Patent and Trademark Office electronic filing system on June 1, 2009.

By: 

Name: Shirley A. Betlach

Mail Stop Appeal Brief - Patents
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

We are transmitting herewith the attached correspondence relating to this application:

- ☒ Transmittal sheet containing Certificate of Electronic Filing
- ☒ Reply Brief (16 pgs.)
- ☒ Petition Under 37 C.F.R. § 1.181 (2 pgs.)

Please apply any charges not covered, or any credits, to Deposit Account No. 50-1778.

Date:

June 1, 2009

SHUMAKER & SIEFFERT, P.A.
1625 Radio Drive, Suite 300
Woodbury, Minnesota 55125
Telephone: 651.286.8346
Facsimile: 651.735.1102

By:



Name: Jessica H. Kwak
Reg. No.: 58,975

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	John W. Forsberg; Mark E. Schommer; David P. Olson; William C. Phillips; Alex C. Toy; Charles R. Lewis, Jr.	Confirmation No.	9349
Serial No.:	10/693,005		
Filed:	October 24, 2003	Customer No.:	28863
Examiner:	Christopher A. Flory		
Group Art Unit:	3762		
Docket No.:	1023-294US01		
Title:	MEDICAL DEVICE PROGRAMMER WITH INFRARED COMMUNICATION		

REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450,
Alexandria, VA 22313-1450

Sir:

This is a Reply Brief responsive to the final Office Action mailed March 21, 2008, the Advisory Action mailed October 1, 2008, and the Examiner's Answer dated April 1, 2009. The due date for this Reply Brief is June 1, 2009.

No fees are believed to be due at this time. Please charge any fees that may be required or credit any overpayment to Deposit Account No. 50-1778.

TABLE OF CONTENTS

	<u>Page</u>
Status of Claims.....	3
Ground of Rejection to be Reviewed on Appeal	4
Argument	5

STATUS OF CLAIMS

Claims 1–12, 14–21, and 32 are pending and are the subject of this Appeal. Claim 13 and 22–31 were previously canceled. Claims 1–12, 14–21, and 32 are set forth in Appendix A of the previously filed Appeal Brief. The originally filed application included claims 1–19. Claim 13 was canceled and claims 20–31 were added in a Preliminary Amendment filed on March 9, 2004. Claims 22–31 were canceled and claim 32 was added in an Amendment filed on August 30, 2006.

Claims 1–12, 14, 15, 17–21, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Meadows et al. (U.S. Patent No. 6,516,227, hereinafter referred to as Meadows) in view of Whitehurst et al. (U.S. Patent Application Publication No. 2003/0229383, hereinafter referred to as Whitehurst). Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Meadows in view of Whitehurst and further in view of Stanton et al. (U.S. Patent No. 6,249,703, hereinafter referred to as Stanton).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Appellant submits the following grounds of rejection to be reviewed on appeal:

1. Whether claims 1–12, 14, 15, 17–21, and 32 are unpatentable under 35 U.S.C. § 103(a) over Meadows in view of Whitehurst; and
2. Whether claim 16 is unpatentable under 35 U.S.C. § 103(a) over Meadows in view of Whitehurst and further in view of Stanton.

ARGUMENT

In the Examiner's Answer to Appellant's Appeal Brief, the Examiner provided a clarification of the rejection of the claims in the Response to Argument section, which begins on page 10 (item 10) of the Examiner's Answer. For brevity, this Reply Brief only addresses aspects of these new arguments. Accordingly, this Reply Brief is not intended to address all arguments provided in the Examiner's Answer, and Appellant requests full consideration of all arguments set forth in the Appeal Brief filed on December 8, 2008.

Independent Claim 1

Appellant's independent claim 1 recites a medical device programmer comprising an infrared (IR) interface to receive changes to software executed by a processor within the programmer during an IR communication session, and a controller to activate the IR interface to seek an IR communication session for a finite period of time in response to power-up of the programmer, and deactivate the IR interface after the finite period of time if the IR communication session is not established. Thus, according to claim 1, an IR interface seeks a communication session for a limited period of time (i.e., a finite seeking period) and deactivates if the communication session is not established within that limited period of time, rather than indefinitely seeking the communication session during the entire time the programmer is powered on.

The Examiner rejected claim 1 as being obvious over Meadows in view of Whitehurst. As noted in the Appeal Brief, Whitehurst relates entirely to a radio frequency (RF) communication technique for use between an implanted device and an external remote device, and provides no teachings that are pertinent to IR communication between two external devices. Thus, combining the disclosures of Meadows and Whitehurst would result in an altered RF interface between the handheld programmer and implantable pulse generator described by Meadows. The IR interface between the handheld programmer and the clinician programmer disclosed by Meadows would remain unchanged.

In the Examiner's Answer, the Examiner stated that RF and IR are both well-known and interchangeable communication means used in the medical art.¹ However, Meadows and Whitehurst contemplate different applications for the RF and IR interfaces. Even if RF and IR techniques are interchangeable, an assertion with which Appellant disagrees, it is unclear why one of ordinary skill contemplating IR communication between the handheld and clinician programmers of Meadows would have even consulted the RF communication between an implanted device and programmer described by Whitehurst. As described in the Appeal Brief, due to the different device considerations for implant-programmer communication and programmer-programmer communication, one having ordinary skill in the art would not have looked to the RF telemetry receiver of the Whitehurst implanted device to modify the IR interface of the Meadows external programmer.

In the Response to Arguments, the Examiner stated that Appellant asserted that a combination of Meadows and Whitehurst "would result in some non-functional IR/RF hybrid device with one modality on one side and another modality on the other."² Appellant did not make such an assertion in the Appeal Brief. Rather, Appellant noted that modifying the Meadows programmer in view of the RF telemetry technique disclosed by Whitehurst would result in an altered RF interface of the Meadows programmer, rather than an altered IR interface. Accordingly, even if combined, Meadows in view of Whitehurst would not disclose each and every element of Appellant's claim 1.

According to the Examiner, because an internal device and external device are always used in concert, an improvement to the telemetry means of one would provide a corollary improvement to the communication means of the other.³ This rationale for modifying the IR interface of Meadows with the RF communication technique disclosed by Whitehurst lacks a rational underpinning.⁴ Although an improvement in the telemetry means of an internal device may improve the telemetry between the external device and the internal device, it does not necessarily follow that an improvement in the telemetry interface between the internal and

¹ Examiner's Answer at p. 11.

² *Id.* at p. 13.

³ *Id.* at pp. 11 and 12.

⁴ See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007), citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

external device would improve the telemetry interface between two external devices. For example, improving the RF telemetry interface between the implanted device and handheld programmer of Meadows would not necessarily improve the IR telemetry between the handheld and clinician programmers of Meadows.

The Examiner asserted that Appellant's claim 1 "does not positively and specifically recite a finite seeking period and most definitely does not recite a listening period, but simply requires that the controller 'seek . . . for a finite period of time.'"⁵ On this basis, the Examiner concluded that Meadows discloses this feature of claim 1 because when "a communication session is established in Meadows, the seeking would necessarily end and be finite." As an initial matter, Appellant notes that the Examiner previously acknowledged that Meadows fails to disclose or suggest an IR interface that seeks a communication session for a finite period of time.⁶ Moreover, the Examiner erred in concluding that claim 1 does not positively recite a finite seeking period. Claim 1 requires a controller that controls an IR interface to seek a communication session for a limited period of time and deactivate if the communication session is not established within that limited period of time. It is unclear how seeking an IR communication session for a finite period of time, as required by claim 1, can reasonably be considered to be something other than a finite seeking period, as asserted by the Examiner.

The Examiner's assertion that Appellant's claim 1 "simply requires that the controller 'seek . . . for a finite period of time'" indicates a lack of understanding of claim 1. The interpretation of claim 1 by the Examiner overlooks the entirety of the claim language and, therefore, was erroneous. Claim 1 does not merely require a controller that activates an IR interface to seek an IR communication session for a finite period of time, but a controller that also deactivates the IR interface after the finite period of time if the IR communication session is not established. Thus, the finite period of time recited in Appellant's claim 1 is also the period of time after which the controller deactivates the IR interface if an IR communication session is not established within that finite period of time. Even if the programmer disclosed by Meadows

⁵ Final Office Action at dated March 21, 2008 at p. 5 (item 5) and Examiner's Answer at p. 12.

⁶ Examiner's Answer at p. 3.

establishes an IR communication session at some point (a “finite period of time” according to the Examiner), Meadows does not suggest the finite period of time recited in Appellant’s claim 1.

The Examiner also asserted that the recitation of “in response to power-up” in claim 1 “does not limit the activation to being [sic] immediately following or irreversibly and unavoidably resulting from the power-up of the programmer, but merely implies that the seeking happens after the power-up occurs.”⁷ The Examiner also interpreted “in response to power-up” to be “in no way tied temporally to the power-up process.”⁸ The Examiner’s interpretation of “in response to power-up” was erroneous. Claim 1 must be given its broadest reasonable interpretation consistent with the specification as it would be interpreted by one of ordinary skill in the art.⁹ The Examiner’s interpretation of “in response to power-up” is inconsistent with Appellant’s specification, as well as the ordinary meaning of the term “in response to.”

Claim 1 requires the controller to activate the IR interface in response to power-up of the programmer. Thus, the language of claim 1 makes clear that the IR interface is activated as a direct result of the power-up of the programmer, not any time after power-up as the Examiner asserts.¹⁰ As discussed in the Appeal Brief, Meadows in view of Whitehurst fails to disclose or suggest a controller that activates an IR interface in response to power-up of a programmer.

According to the Examiner, the recitation of “in response to power-up” merely requires some action to take place “after” power-up.¹¹ The Examiner’s interpretation of “in response to power-up” reads the limitation “in response to” out of claim 1, which is improper.¹² In addition, the Examiner’s interpretation of “in response to power-up” is unreasonable in light of Appellant’s specification, which refers to activation of an IR interface for a finite period of time that begins upon power-up of the programmer. For example, Appellant’s disclosure refers to an IR interface that remains active for a period of time “following power-up.”¹³ Appellant’s

⁷ *Id.* at p. 12.

⁸ *Id.* at p. 14.

⁹ See *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005).

¹⁰ See Examiner’s Answer at p. 14.

¹¹ *Id.* at p. 13.

¹² See *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558 (Fed. Cir. 1991).

¹³ Appellant’s disclosure at p. 6, ll. 18–25.

disclosure also states that a programmer can include an IR interface that is “activated when the device is powered up.”¹⁴

The Examiner asserted that “there is neither explicit recitation nor even the implication that seeking must occur instantaneously after power-up.”¹⁵ This assertion, however, reflects a lack of understanding or a failure to consider Appellant’s specification. Appellant’s disclosure states that:

A controller may control infrared interface 70 to initiate an infrared communication session for a period of time, such as approximately 5 to 10 seconds, following power-up of programmer 20. If an infrared source is applied to infrared interface 70 during the period of time immediately following power-up, the controller maintains the infrared communication session until the software changes are uploaded. Hence, upon power-up of programmer 20, e.g. by replacement of batteries or activation of an “on” button, infrared interface 70 is powered up and enters a short listening period to establish communication with a field programmer, if present.¹⁶

The Examiner failed to give any meaningful weight to the claimed requirement that a controller activate an IR interface to seek an IR communication session “in response to” power-up, and appears to have overlooked Appellant’s specification. As a result, the interpretation of claim 1 by the Examiner fails to amount to a broadest reasonable construction of claim 1 in light of the specification.¹⁷ The rejection of claim 1 should be reversed based on at least the Examiner’s unreasonable construction of claim 1.

The Examiner appeared to be relying on an unreasonable and unsupported interpretation of the Meadows reference to support the rejection of claim 1. The Examiner asserted that Meadows discloses that “hardware recognition (i.e. the initiation of an infrared interrogation session) is initiated as soon as the programmer is connected to the system, i.e. powered on” and referred to column 32, lines 35–36 and 50–62.¹⁸ The Examiner reasoned that because Meadows discloses that hardware recognition is initiated as soon as the clinician programmer is connected

¹⁴ *Id.* at p. 6, ll. 12–17.

¹⁵ Examiner’s Answer at p. 14.

¹⁶ Appellant’s disclosure at p. 17, ll. 4–11.

¹⁷ See *Phillips*, 415 F.3d at 1316, citing *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

¹⁸ Examiner’s Answer at p. 14.

to the system, the implanted device must inherently seek a communication session in order to establish an uplink for telemetering data to and from the external programmer.¹⁹

It is unclear how the seeking of a communication session by the implanted device is relevant to the activation of an IR interface of the handheld programmer of Meadows. Even if the seeking of a communication session by the implanted device results in IR communication between a clinician programmer and the handheld programmer, an assertion with which Appellant does not necessarily agree, Meadows does not provide any indication as to when the IR interface of the handheld programmer is activated. As noted in the Appeal Brief, the Examiner relied on an improper finding of an inherent disclosure in Meadows to support the assertion that Meadows discloses a controller that activates an IR interface to seek an IR communication session for a finite period of time in response to power-up of a programmer, as required by Appellant's claim 1.

For at least these reasons, the rejection of claim 1 was erroneous and should be reversed.

Claims 6–9

In the Response to the Argument section of the Examiner's Answer, the Examiner asserted that "[t]he Examiner cited numerous references to suggest the obviousness of [the limitation of claims 6–9]" and referred to U.S. Patent Application Publication No. 2003/0177031 to Malek, U.S. Patent Application Publication No. 2004/0125029 to Maoz et al., U.S. Patent No. 6,614,664 to Lee, U.S. Patent No. 6,418,034 to Weber et al., and U.S. Patent No. 6,073,033" as examples of references that have "clear examples of software loaded into a housing through a port."²⁰ The Examiner also provided a list of examples (memory cards, SIM cards in GSM cell phones, etc.), and asserted that the examples support the assertion that "such an accessible software port is a common and well-known element in the art."²¹ Thus, in the Examiner's Answer, the Examiner appeared to be relying on common knowledge in the art to support the rejection of claims 6–9.

¹⁹ *Id.* at pp. 14 and 15 (emphasis added).

²⁰ *Id.* at p. 16.

²¹ *Id.* at p. 17.

The Examiner previously relied on Meadows to reject claim 6 (from which claims 7–9 depend). In particular, the Examiner asserted that “the device of Meadows et al. is shown in Fig. 5 to be constructed of a housing with more than one part . . . Any electronic device comprising housing of more than one part and containing software loaded on a memory inherently comprises a software loading port . . .”²² The Examiner did not previously rely on common knowledge in the art to support the rejection of claims 6–9. Thus, the Examiner’s reliance on common knowledge in the art and reference to prior art (as well as the Samsung SCH-u740 cell phone or the Palm Centro, which have not been established as prior art, as discussed below) in the Examiner’s Answer is a new ground of rejection.

The Examiner failed to identify the newly asserted rejection as a new ground of rejection in the Examiner’s Answer or to positively include the new ground of rejection the statement of rejection.²³ Instead, the Examiner included the new ground of rejection in a Response to Arguments section of the Examiner’s Answer, which follows the Grounds of Rejection section. Appellant has filed a Petition under 37 C.F.R. 1.181(a) requesting that the ground of rejection of claims 6–9 that relies on an assertion of knowledge in the art, which was first set forth in the Examiner’s Answer, be designated as a new ground of rejection.

The references cited by the Examiner fail to disclose or suggest a medical device programmer that includes a software loading port for loading the software into memory upon assembly of the programmer and a housing defining an aperture that provides access to the software loading port, as required by claim 6. For example, Lee does not even disclose a medical device programmer, much less a device with a housing that defines an aperture. Instead, Lee discloses and illustrates memory modules that are not enclosed in housings. As another example, Maoz et al. fails to disclose or suggest a housing defining an aperture, much less an aperture that provides access to a software loading port. Weber et al. merely illustrates various circuit boards, and fails to disclose or suggest a medical device programmer or a housing that defines aperture that provides access to the software loading port, as required by claim 6. Campo and Malek also fail to disclose or suggest the programmer of Appellant’s claims 6–9.

²²Final Office Action dated March 21, 2008 at p. 7.

²³ See *In re Hoch*, 428 F.2d 1341, 1342 n. 3 (CCPA 1970).

The Examiner failed to establish that the assertion of common knowledge in the art is supported by the prior art. Accordingly, the Examiner's reliance on common knowledge in the art was improper to support the rejection of claims 6–9 was erroneous²⁴ and the rejection of claims 6–9 should be reversed.

In the Examiner's Answer, the Examiner also asserted a new ground of rejection that improperly relied on the Samsung SCH-u740 cell phone and the Palm Centro as “[t]wo readily available examples” of devices that have an accessible software port.²⁵ The Examiner's reliance on the devices that the Examiner had “in his pocket”²⁶ when writing the final Office Action of March 2008 and the Examiner's Answer was improper. For example, the Examiner did not establish that the Samsung SCH-u740 cell phone or the Palm Centro are prior art references. The Examiner appeared to be relying on his own personal knowledge or taking official notice of facts to support the assertion that the Samsung SCH-u740 cell phone and the Palm Centro provide examples of knowledge in the art. However, the Examiner neither provided an affidavit nor declaration setting forth a specific factual statement and explanation to support the finding nor provided Appellant the opportunity to request such an affidavit or declaration.²⁷ Accordingly, the Examiner's reliance on the Samsung SCH-u740 cell phone and the Palm Centro support the assertion of knowledge in the art made in the final Office Action was improper.

The Examiner also stated that he cited “numerous references to suggest the obviousness of” claims 6–9. However, the proper inquiry is not whether the prior art suggests claims 6–9 are obvious, but whether the difference between Appellant's claimed subject matter and the prior art are such that the claimed subject matter as a whole would have been obvious at the time Appellant's invention was made to a person having ordinary skill in the art.²⁸

For at least these reasons, the rejection of claims 6–9 was erroneous and should be reversed.

²⁴ See *In re Ahlert*, 424 F.2d 1088, 1091 (CCPA 1970).

²⁵ Examiner's Answer at p. 17.

²⁶ *Id.*

²⁷ MPEP 2144.03, citing 37 C.F.R. 1.104(d)(2).

²⁸ 35 U.S.C. § 103(a).

Claims 11, 12, 14, and 17

As discussed in the Appeal Brief, the Examiner did not cite any prior art references that disclose a programmer that includes telemetry circuitry and display and display circuitry on separate circuit boards, as recited by claim 11 (claims 12, 14, and 17 depend from claim 11). In support of the rejection of claim 11, the Examiner merely stated that it would have been obvious to use a “two circuit board design.”²⁹ In the Examiner’s Answer, the Examiner referred to the Samsung SCH-u740 cell phone and asserted that the Samsung SCH-u740 cell phone “clearly reads on the claim limitation.”³⁰ In particular, the Examiner asserted that the in the Samsung SCH-u740 cell phone, “the antenna and telemetry circuitry is contained in the half of the phone held in the hand, while the display is contained on the portion that flips open.”³¹ The Examiner’s reliance on the Samsung SCH-u740 cell phone to support the rejection of claims 11, 12, 14, and 17 as being obvious over Meadows in view of Whitehurst is improper.

As discussed above, the Examiner failed to establish that the Samsung SCH-u740 cell phone is even prior art or provide an affidavit or declaration setting forth a specific factual statement and explanation to support the assertion that the Samsung SCH-u740 cell phone has the asserted configuration. Thus, the Examiner’s reliance on the Samsung SCH-u740 cell phone was improper and the rejection of claims 11, 12, 14, and 17 should be reversed.

The Examiner failed to previously present the rejection of claims 11, 12, 14, and 17 based on the Samsung SCH-u740 cell phone. Thus, the Examiner’s reliance on the Samsung SCH-u740 cell phone in the Examiner’s Answer is a new ground of rejection. However, the Examiner did not identify the rejection of claims 11, 12, 14, and 17 based on the Samsung SCH-u740 cell phone as a new ground of rejection in the Examiner’s Answer. Appellant has filed a Petition under 37 C.F.R. 1.181(a) requesting that the ground of rejection of claims 11, 12, 14, and 17 based on the Samsung SCH-u740 cell phone that relies the Samsung SCH-u740 cell phone, which was first set forth in the Examiner’s Answer, be designated as a new ground of rejection.

As noted in the Appeal Brief, the Examiner failed to demonstrate that each and every element of claim 11 is found within the prior art and failed to provide a reason for placing the

²⁹ Examiner’s Answer at p. 17.

³⁰ *Id.*

³¹ *Id.*

telemetry circuitry and display and display circuitry on separate circuit boards. For at least these reasons, the Examiner's rejection of claims 11, 12, 14, and 17 was erroneous and should be reversed.

Claim 15

Claim 15 recites a programmer including an internal antenna defining an aperture and a battery bay extending at least partially into the aperture. In the Examiner's Answer, the Examiner continued to rely on Causey et al. (U.S. Patent Application Publication No. 2002/0002326, hereinafter referred to as Causey) and Malek (U.S. Patent Application Publication No. 2003/0177031) as teaching an internal antenna defining an aperture and a battery bay extending at least partially into the aperture.³² As noted in the Appeal Brief, neither Causey nor Malek disclose or suggest the features of claim 15.

The Examiner also asserted a new ground of rejection to support the rejection of claim 15, but failed to identify the new ground of rejection as such. In particular, the Examiner improperly asserted a new ground of rejection that relied on the Samsung SCH-u740 cell phone to support the rejection of claim 15 and stated that the Samsung SCH-u740 cell phone "clearly reads on the claim limitation" of claim 15.³³ The Examiner asserted that "[r]emoval of the battery cover of such a cell phone clearly reveals that the antenna extends into the battery bay."³⁴ Claim 15, however, does not recite an antenna that extends into a battery bay. Instead, claim 15 specifies that the internal antenna of a programmer defines an aperture and the programmer further comprises a battery bay that extends at least partially into the aperture.

The rejection of claim 15 should be reversed based at least on the Examiner's erroneous interpretation of claim 15 as well as the improper reliance on the Samsung SCH-u740 cell phone, which has not been established as prior art.

In the Examiner's Answer, the Examiner also asserted that "the extension of the antenna into the battery bay is not seen as providing any benefit either to battery function or antenna

³² *Id.* at p. 19.

³³ *Id.*

³⁴ *Id.*

function.”³⁵ Even if the establishment of a particular benefit was pertinent to the issue of obviousness, it appears that the Examiner has misread Appellant’s claim language, which recites a battery bay that extends at least partially into the aperture defined by an internal antenna. In addition, the Examiner’s rationale in support of the rejection of claim 16 suggests that the Examiner overlooked Appellant’s disclosure, which states that positioning a battery bay to extend at least partially into an aperture defined by the internal antenna can reduce external magnetic interference to the internal antenna by providing an RF load to the internal antenna, enhancing noise immunity.³⁶

The Examiner has not cited any references that teach or suggest the programmer recited in Appellant’s claim 15. The Examiner’s reliance on “design choice” without further support found within a prior art reference is improper, and the rejection of claim 15 should be reversed.

Claim 16

The Examiner stated that Appellant’s arguments with respect to the erroneous rejection of claim 16 are moot “based on the finding related to claim 11” provided in the Examiner’s Answer.³⁷ The arguments made in the Appeal Brief with respect the rejection of claim 16 are not moot. As noted above, the Examiner did not cite any prior art references that disclose a programmer that includes telemetry circuitry and display and display circuitry on separate circuit boards, as recited by claim 11, from which claim 16 depends. Thus, the Examiner failed to meet the burden of establishing a *prima facie* case for obviousness of claim 16.

³⁵ *Id.*

³⁶ Appellant’s disclosure at p. 23, ll. 8–11.

³⁷ Examiner’s Answer at p. 20.

CONCLUSION

For at least these reasons and the reasons discussed in Appellant's Appeal Brief, the Examiner has failed to establish a *prima facie* case for obviousness of Appellant's claims 1-12, 14-21, and 32. In view of Appellant's arguments present in this Reply Brief and in the previously-filed Appeal Brief, the final rejection of Appellant's claims was improper and should be reversed. Reversal of all pending rejections and allowance of all pending claims is respectfully requested.

Date:

By:

June 1, 2004
SHUMAKER & SIEFFERT, P.A.
1625 Radio Drive, Suite 300
Woodbury, Minnesota 55125
Telephone: 651.283.8346
Facsimile: 651.735.1102

Jessica H. Kwak
Name: Jessica H. Kwak
Reg. No.: 58,975